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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/934,851	08/23/2001	Cuong Tu Dang	78945-18/jlo	9125
29382	7590	06/15/2005	EXAMINER	
TROPIC NETWORKS INC. DR. VICTORIA DONNELLY 135 MICHAEL COWPLAND DRIVE KANATA, ON K2M 2E9 CANADA			WONG, BLANCHE	
			ART UNIT	PAPER NUMBER
			2667	

DATE MAILED: 06/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

2X

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/934,851		DANG ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Blanche Wong		2667	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7-10, 12, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 2-6, 11, 13-17 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>Aug23'01</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 11 is objected to because of the following informalities: consistency. Examiner suggest replacing -- maintaining the control network link using available bandwidth of one of said first communication links -- with "maintaining the control network link using available bandwidth of one of said first communication links between the respective nodes" as recited in cl. 6.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. **Claims 7-10,18,19** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to cl. 7, ln. 11-12, it is unclear whether the first and second communication links are separate links. That is, it is unclear what is meant "using one of said second communication links or bandwidth of one of said first communication links".

With regard to cl. 8, ln. 1-3; cl. 9, ln. 3-5; cl. 10, ln. 1-3, the claims recite – [a] step of establishing the control network link using bandwidth of one of said first communication links – in cl. 7. However, the only step in cl. 7, ln. 11-14, is – establishing, using one of said second communication links or bandwidth of one of said first communication links, a control network link --. These are two different steps.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1,7 and 12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. (U.S. Pat No. 6,862,288) in view of Elliott (U.S. Pat No. 6,456,599).

With regard to cl. 1, Sharma disclose a method of automatically creating a control network (a highly available communications system of circuit reestablishment and tear-down without manual intervention) comprising the steps of, in each of a plurality of nodes (col. 4, ln. 57):

to each of [neighbour nodes] the node has a direct communication link for communication user traffic 146,148,150,152,154 (data, col. 5, ln. 32-46) with the neighbour nodes; and

establishing a control network link 150,152,154,156,158 (cntl, col. 5, ln. 32-46) for communicating control network traffic directly with each of said neighbour nodes in said list.

However, Sharma fails to explicitly show establishing a list of a plurality of neighbor nodes.

In an analogous art, Elliott discloses establishing S2,S3, Fig. 3 (establish a network link or confirm existing link, and then gather information regarding potential neighbors, col. 8, ln. 38-52) a list of a plurality of neighbor nodes (see also list of full and potential neighbors in a format of a routing message in Fig. 8, col. 7, ln. 49-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to maintain a list of neighboring nodes at each node. The suggestion/motivation for doing so would have been to provide for ad hoc networks (Elliott, col. 4, ln. 33-35) that simplify routing and minimize routing traffic. Elliott, col. 4, ln. 8-9. Therefore, it would have been obvious to combine Elliott with Sharma for the benefit of each node having a list of neighboring nodes to obtain the invention as specified in cl. 1.

With regard to cl. 7, Sharma discloses a method of automatically creating a control network (a highly available communications system of circuit reestablishment and tear-down without manual intervention) comprising the steps of, in each nodes (col. 4, ln. 57):

establishing, using one of said second communication links or bandwidth 150,152,154,156,158 (cntl, col. 5, ln. 32-46) of one of said first communication links 146,148,150,152,154 (data, col. 5, ln. 32-46), a control network link 150,152,154,156,158 (cntl, col. 5, ln. 32-46) for communicating control network traffic directly with each of said respective neighbour nodes.

However, Sharma fails to explicitly show determining each of said plurality of respective neighbour nodes.

In an analogous art, Elliott discloses determining S2,S3, Fig. 3 (establish a network link or confirm existing link, and then gather information regarding potential neighbors, col. 8, ln. 38-52) each of said plurality of respective neighbor nodes (see also list of full and potential neighbors in a format of a routing message in Fig. 8, col. 7, ln. 49-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to maintain a list of neighboring nodes at each node. The suggestion/motivation for doing so would have been to provide for ad hoc networks (Elliott, col. 4, ln. 33-35) that simplify routing and minimize routing traffic. Elliott, col. 4, ln. 8-9. Therefore, it would have been obvious to combine Elliott with Sharma for the benefit of each node having a list of neighboring nodes to obtain the invention as specified in cl. 7.

With regard to cl. 12, Sharma discloses a communications network (a highly available communications system of circuit reestablishment and tear-down without manual intervention) comprising a plurality of nodes (col. 4, ln. 57) and a plurality of communication links for communicating user traffic 146,148,150,152,154 (data, col. 5, ln. 32-46) and control network traffic 150,152,154,156,158 (cntl, col. 5, ln. 32-46) between the nodes, and a plurality of neighbour nodes to each of which the nodes has a

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direct communication link for communicating user traffic 146,148,150,152,154 (data, col. 5, ln. 32-46), and is further arranged for automatically establishing and maintaining a control network link for communication control network traffic 150,152,154,156,158 (cntl, col. 5, ln. 32-46) directly with each of said neighbour nodes.

However, Sharma fails to explicitly show wherein each of the nodes is arranged for determining a plurality of neighbour nodes.

In an analogous art, Elliott discloses determining S2,S3, Fig. 3 (establish a network link or confirm existing link, and then gather information regarding potential neighbors, col. 8, ln. 38-52) a plurality of neighbour nodes (see also list of full and potential neighbors in a format of a routing message in Fig. 8, col. 7, ln. 49-65).

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to maintain a list of neighboring nodes at each node. The suggestion/motivation for doing so would have been to provide for ad hoc networks (Elliott, col. 4, ln. 33-35) that simplify routing and minimize routing traffic. Elliott, col. 4, ln. 8-9. Therefore, it would have been obvious to combine Elliott with Sharma for the benefit of each node having a list of neighboring nodes to obtain the invention as specified in cl. 12.

***Allowable Subject Matter***

6. Claims 2-6,11,13-17,20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 571-272-3177. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*BW*

BW  
June 6, 2005



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